AMENDMENTS TO THE CLAIMS:

Complete Listing of Claims

Claim 1. (previously presented)   A method for initiating a contention-free burst by a hybrid coordinator of a network of stations capable of communicating directly to other stations in the network using a shared communications medium comprising:

determining whether the shared communications medium is busy or idle;

if the shared communications medium is idle, determining whether the medium has been idle for a first predetermined time period, and:

if so, transmitting information immediately, and

if not, waiting until the medium has been idle for the first predetermined time period, and then transmitting information; and

if the shared communications medium is busy, determining whether the shared communications medium is busy due to a transmission from a station within the network, and:

if so, transmitting information after a second predetermined time period after the shared communications medium becomes idle, and

if not, transmitting information after a third predetermined time period after the shared communications medium becomes idle   .

Claim 2. (previously presented)   The method of claim 1, wherein the first predetermined time period is a point coordination function inter-frame space (PIFS) period.

Claim 3. (canceled)

Claim 4. (previously presented)   The method of claim 1, wherein the second predetermined time period is a short inter-frame space (SIFS) period.

Claim 5. (previously presented)   The method of claim 1, wherein the third predetermined time period is a point coordination function inter-frame space (PIFS) period.

Claim 6. (previously presented)   The method of claim 1, wherein the contention-free burst is of limited duration and the hybrid coordinator has more information to transmit than can be transmitted in the contention-free burst, the method further comprises:

(1) waiting a fourth predetermined time period after the completion of the contention-free burst;

(2) generating a backoff time;

(3) initiating a backoff procedure; and

(4) initiating a new contention-free burst when the backoff procedure completes.

Claim 7. (previously presented)   The method of claim 6, wherein the fourth specified time period is a point coordination function inter-frame space (PIFS) period.

Claim 8. (previously presented)   The method of claim 6, wherein the step of initiating a backoff procedure comprises:

inserting the backoff time into a backoff timer;

decrementing the backoff timer each time an idle slot expires; and

completing the backoff procedure when the backoff counter reaches zero.

Claim 9. (original)   The method of claim 6, wherein the method is repeated until the hybrid coordinator transmits all of its information.

Claim 10. (original) The method of claim 6, wherein a second hybrid coordinator may take control of the shared medium by initiating a contention-free burst of its own while the hybrid coordinator is attempting to initiate a new contention-free burst.

Claim 11. (original) The method of claim 10, wherein the second hybrid coordinator may initiate the contention-free burst after the shared medium has been idle for a PIFS period.

Claim 12. (original) The method of claim 6, wherein the backoff time is randomly

chosen from a contention window of [0, CWHC)

where CWHC = CWHCmin + 1, and CWHCmin is a prespecified value.

Claim 13. (original) The method of claim 12, wherein a collision occurs due to

the initiating of the new contention-free burst, and wherein the method comprises

an additional step of (5) repeating steps (1)-(4) with the backoff time being

randomly chosen from a contention window of [0, 2*CWHC).

Claim 14. (original) The method of claim 13, wherein the contention window is

doubled each time the method repeats due to a collision resulting from the

initiating of the new contention-free burst.

Claim 15. (original) The method of claim 14, wherein the contention window has

a maximum size of [0, CWHCmax + 1)

where CWHCmax is a prespecified value.

Claim 16. (original) The method of claim 15, wherein a default value of

CWHCmax is equal to CWHCmin and CWHCmin is defaulted to three time slots.

Claims 17-41. (canceled)